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STATEMENT BY

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DEPUTY ASSISTANT SECRETARY OF DEFENSE

(INFORMATION MANAGEMENT)

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

READINESS SUBCOMMITTEE

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Mr. Chairman and members of the subcommittee, I appreciate this opportunity to appear before you today to discuss the Department of Defense information management initiatives -- key among these are our Corporate Information Management (CIM) and the Defense Information Infrastructure (DII) initiatives. I will briefly describe the context for CIM and the DII, followed by the CIM goals and accomplishments, and then summarize where we stand on strengthening the DII and making it more responsive to the needs of the warfighter.

THE ENVIRONMENT - CURRENT AND FUTURE

The President has pledged that our Armed Forces will remain the best-equipped, best-trained, and best-prepared fighting force on the face of the earth. Both he and the Secretary of Defense have committed themselves to maintaining a lean, high-tech, agile, ready-to-fight military force during a time in which:

- The threats are changing and unpredictable,
- The President's budget for Defense for Fiscal Year 1995 is 35 percent below the peak level of Fiscal Year 1985, and
- Defense is downsizing -- thus, placing increased emphasis on the effective and efficient use of information technology to compensate for these losses.

Automation, advance electronics, worldwide communications, modern sensors, and order of magnitude increases in complexity and capability make information management pivotal to managing the employment of military forces.

The Defense information infrastructure provides the basic backbone for the information transfer services required to support the Readiness and Sustainability goals

of the Department. This infrastructure supports command and control and intelligence information transfer requirements as well as personnel, medical, financial, and logistics requirements. The increased productivity and flexibility needed to support the deployment of forces tethered to a home base, and participating in joint operations, is dependent on achieving a DII that is capable of meeting the critical information transfer needs of our forces.

For example, in Europe and Desert Storm we deployed large mainframe computing support for personnel, administration and logistics support. Today this support can be provided from the Continental United States home base. This allows for more combatant forces to be deployed or for fewer lift requirements for the same force levels.

Consequently, there needs to be a smooth flow of information, over longer distances, without having to first solve compatibility and interoperability problems. Further, information, as the vital resource of modern warfare, must be protected commensurate with its intended use.

With changing threats, a constrained funding level, and force reductions, we must determine how information technology can best be used to live up to the President's and the Secretary's commitment. We must reshape Defense capabilities, rather than just shrinking them. We must smartly create an environment to support movement of information horizontally and vertically, without regard to organization or Service boundaries. We must ensure that our base-level information infrastructure is capable of being projected into areas where an infrastructure does not exist. As with other technologies, information technology is important only insofar as the functionality it provides. We must look at the context for its uses, and determine how it can best be exploited for improving mission support.

Despite our inclination to the contrary, we cannot lose sight of the fact that information management exists as support to functions such as financial management, personnel management, logistics, and health care. When it comes to making business decisions about these functions, including the applications and systems which support them, responsibility for these decisions lies squarely on the shoulders of the senior officials responsible for the functional area.

The bottom line for all of our efforts is support for the warfighter; this is why the Department exists, and I can assure you that we in the information management community will not lose sight of this as we pursue Corporate Information Management (CIM) and Defense Information Infrastructure (DII) initiatives.

CORPORATE INFORMATION MANAGEMENT

By way of background, the Corporate Information Management (CIM) initiative was established in October 1989 by the then Deputy Secretary of Defense. The objectives are:

- To ensure the standardization, quality, and consistency of data from DoD's multiple management information systems,

- To identify and implement management efficiencies in support of business areas throughout the information system life cycle, and

- To eliminate duplication of efforts in the development of multiple information systems designed to meet a single functional requirement.

In the following several years, the Department has put in place policies, procedures, guidelines, and tools to support and implement the CIM initiatives.

This administration's commitment to reinvent government is strongly echoed in the CIM initiative. The DoD leadership has expressed strong commitment to CIM goals, and embraced CIM as a means to achieve Department-wide improvements, efficiencies and productivity. In fact, the Deputy Secretary of Defense (now Secretary of Defense) reaffirmed his commitment to CIM by greatly accelerating the pace at which the Department is to:

- Select and deploy migration systems,

- Define standard baseline processes and data requirements, and implement data standardization, and

- Conduct functional process improvement reviews and assessments (business process re-engineering) within and across all functions of the Department.

I will now address each of these major initiatives.

Migration Systems Selection

The Deputy Secretary of Defense directed that each senior functional official select their migration systems in six months, with follow-on DoD-wide transition to the selected

systems over a period not to exceed three years. Clearly, the course has been charted.

I believe we have made progress over the last six months in terms of further defining the direction, and getting people focused, energized and committed. We have published generic criteria for the selection of migration systems which involves a balance of functional, technical, programmatic and data factors. The services of the Defense Information Systems Agency (DISA) have been made available to the senior functional officials for assistance in the selection process. DISA has automated tools, contractor support and one-on-one support available to help officials in their selection process. In addition, DISA has conducted numerous workshops on the automated tools and development of functional economic analyses. The senior functional officials are in varying stages of the migration system selection process.

For example, the Procurement and Contract Administration community has selected migration systems for procurement and contract administration. Joint requirements for base level procurement have been defined, and efforts are underway to evaluate the feasibility of incorporating these requirements into the selected procurement migration systems. The goal is to eliminate legacy systems for base level procurement activities at approximately 350 DoD sites world-wide. Also, the financial management people have made some migration system selections and implementation progress, but I will defer to the Comptroller to address these.

This month the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) is reviewing, with the senior functional officials, progress on the selection process.

Notwithstanding the short-term progress that has been made, and acceptance within the Department regarding the charted course, issues have and will continue to surface. The current emerging ones are schedule, resources, and integration.

We clearly recognize that the six months for selection and three years for transition are ambitious time frames. Philosophically, however, we believe we will achieve better results if we set tight time frames with some potential slippage, rather than if we were to continue on our previous course.

As we are approaching the close of the migration system selection phase and entering the transition phase, we recognize the need for a disciplined management process to address the myriad of issues that will arise. Accordingly,

we have established an Enterprise Integration (EI) Executive Board and a supporting EI Corporate Management Council. The Deputy Secretary of Defense will chair the EI Board and the Principal Deputy Under Secretary of Defense (Acquisition and Technology) will serve as the Executive Secretary. Membership on the Board includes the Secretaries of the Military Departments, Vice Chairman of the Joint Chiefs of Staff, the Under Secretaries of Defense, the Comptroller of the DoD, the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), and the General Counsel of the DoD.

The EI Corporate Management Council will be co-chaired by the Principal Deputy Under Secretary of Defense (Acquisition and Technology) and the Assistant Secretary of Defense (Command, Control, Communications and Intelligence). I will serve as the Executive Secretary. The Council members are the Under Secretary of Defense (Personnel and Readiness); the Comptroller of the DoD; two Assistant Secretaries of Defense - Health Affairs and Reserve Affairs; the Director, Program Analysis and Evaluation; four Deputy Under Secretaries of Defense - Policy/Chief of Staff, Acquisition Reform, Environmental Security, and Logistics; the Director for Command, Control, Communications and Computer Systems in the Office of the Joint Chiefs of Staff; and representatives of the Military Departments as nominated by the Service Secretaries.

These management forums will be responsible for making decisions that will allow the Department to transition to cross-functional and integrated processes, data and supporting information systems.

Data Standardization

Consistent with the Deputy Secretary's direction, we are now in the midst of our most concentrated, wide-ranging data standardization effort ever undertaken. The Department has set a goal of standardizing Defense definitions within three years. These standardization actions are receiving high priority by the users of the data. Indeed functional officials, most notably in the financial and the command and control areas, are pressing for accelerated development of data standards in these areas.

We have a comprehensive DoD Data Administration Program that will institutionalize the management of data as a shared resource and provide the organization infrastructure required to effectively implement it. Full implementation of the Program will standardize the vocabulary used within the Department and greatly increase the opportunity for efficient data exchange and integrated operations among DoD information systems. Essentially, the Program provides the means for improving data sharing, controlling data

redundancy, minimizing data handling, and improving data quality and integrity -- all of which support our goals of interoperability among operational forces.

The Department has in place many of the basic elements to achieve the data standardization goals directed by the Deputy Secretary. We have established the DoD Data Administration Program, and associated policies and procedures. The infrastructure has been developed in the form of the assignment of the DoD Data Administrator, the designation of Functional Data Administrators, the establishment of the Data Administration Council, and the creation of the Data Administration Program Management Office. In addition, a comprehensive strategic plan and DoD Enterprise Model has been published -- tying data standardization to the business and mission activities of the Department.

Business Process Re-engineering

This brings me to the final and, perhaps, most critical initiative of business process re-engineering.

Throughout this country, in business and government at all levels, we have allowed non-value-added processes to creep into our business practices and to continue processes that no longer make a valid contribution. Moreover, in many cases we have attempted to use automation as a means to cure what are, in fact, business process ills.

To overcome this problem, we have put in place the tools and techniques to examine business processes, and re-engineer them as necessary to make them operate more effectively and efficiently. We are not just automating the function; rather we are asking ourselves: "Are we doing the right things and are we doing things right?" If the answer to these questions is not an unequivocal "yes", then we are taking steps to improve the business process -- another major aspect of the Corporate Information Management (CIM) initiative.

The importance of taking this type of approach was highlighted in President Clinton's and Vice President Gore's "Technology for America's Economic Growth, a New Direction to Build Economic Strength", dated February 22, 1993:

"Business organizations in many sectors have found that automating existing work processes based on a tradition of processing paper does not always provide the greatest benefits from investment in automation. Efficiency gains from the new technology often can only be captured if changes are made in the structure of their organizations and the way they are managed."

The Department has established a progressive, Business Process Re-engineering (BPR) Program that provides a standard methodology to guide process improvement and re-engineering analysis, and a training and customer support structure to assist in process improvement implementation.

The intent is to have functional managers focus on performing the actual analysis of their functions, rather than on identifying and selecting methods and tools that could assist them in their analysis. The methodology provides a standard way of performing process improvements and greatly facilitates the integration efforts within and across functional areas.

Another element of the BPR Program is the Integrated Toolset which supports the techniques used to perform the various aspects of the Business Re-engineering methodology. This group of tools, predominantly commercial-off-the-shelf applications, is tied to a commercial information repository which enhances enterprise engineering efforts through reuse of collected information.

The current methodology has been used in over 230 Functional Process Improvement projects ranging in scope from small to large projects and include activities within the functional areas of material and logistics management, personnel management, health care, finance, reserve affairs, command and control (C2), communications, and intelligence.

For example, our CINCs have shown a great deal of support for BPR. Using the BPR methodology, the US Special Operations Command conducted a detailed analysis of its readiness monitoring process. Similarly, the US Pacific Command baselined the crisis action planning and execution process for Lesser Regional Contingencies and identified over 30 issues that significantly could improve the process. In the area of deployment preparation, process re-engineering efforts have identified a potential of 70 percent reductions in man-hours needed for soldier readiness processing.

Re-engineering analysis also has been applied to Programmed Depot Maintenance -- one of the most complex logistics operations in DoD. Getting transport planes and submarines into the depot, repaired, modified, and sent back to the fleet requires careful planning and scheduling. The newly developed depot maintenance scheduling system provides work-flow scheduling, helps make the best use of resources, better manages capacity and labor, and better measures performance. The system already has been deployed to eight logistics centers. The cash recovery to investment ratio for the new system is estimated at 5 to 1.

I would like to cite two final examples of how business process analyses and re-engineering are resulting in significant innovative improvements and savings. First, the Deputy Under Secretary of Defense for Logistics has an initiative to apply commercial electronic data interchange standards to more than one billion annual logistics transactions. The development of systems procedures has been completed resulting in about 425 separate transaction formats being reduced to 24 commercial transaction sets. Secondly, in the area of consumable items management, the replenishment cycle time for small purchases has been reduced from 100 days to 4 days, and includes an estimated reduction in annual overhead costs of $100 million.

As business processes are improved and the software systems to support these process are developed, we must ensure that these development activities are performed in a timely and cost-effective manner. The software development and maintenance environment created by our Integrated Computer-Aided Software Engineering (I-CASE) Program substantially provides this assurance. Improved software quality, increased programmer productivity, and reduced software development time and costs are just some of the benefits we expect from I-CASE.

DEFENSE INFORMATION INFRASTRUCTURE

The Defense Information Infrastructure (DII) encompasses information transfer and processing resources, including information and data storage, manipulation, retrieval, and display. More specifically, the DII is the shared or interconnected system of computers, communications, data, applications, security, people, training, and other support structures serving the Department's local and world-wide information needs. It connects DoD mission support, command and control, and intelligence computers and users through voice, data, imagery, video, and multimedia services; and provides information processing and value-added services to subscribers over the Defense Information System Network (DISN). The DISN is the result of consolidating the Military Department's networks within the Continental United States into one centrally managed DoD network. The integration of these networks will provide a single unified DoD transmission infrastructure.

A key element of the DII providing information services to DoD users is the utility. These services include the Defense Information Systems Agency megacenters, information processing, and wide area network communications services.

With this working definition as context, I would like to share with this Committee our goals for the DII, strategies for achieving these goals, the progress we have made, and the direction in which we are headed.

Our objectives are to:

- create a new paradigm and revolutionize information exchange, defense-wide,

- strengthen our ability to effectively apply computing, communications, and information management capabilities to the accomplishment of the Department's mission, and

- significantly reduce the information technology burdens on operational functional staffs -- allowing them to access, share, and exchange information world-wide with minimal knowledge of communication and computing technologies.

In essence, when we began the DII initiative two years ago, we wanted to create an end-to-end information transfer capability which is protected, interoperable, and cost effective with DISA as its central manager.

In 1993, the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) in consultation with the Deputy Secretary of Defense directed further review and study of the Department's implementation of the DII. Moreover, he directed that acquisition, local and base-level communications and engineering activities, as well as central design activities continue to be owned and operated by the Military Departments and the Defense Logistics Agency. Consolidation and centralization of data centers, standards, security, and certain network management functions under DISA are proceeding.

Our data center consolidation recommendations were included in the 1993 Base Closure process. Based on the Secretary of Defense recommendations and the Base Closure Commission's deliberate review and analytical process, in the Fall of last year, the President and the Congress approved the consolidation of 59 Service and Agency data centers into 16 DoD megacenters.

Consistent with the goal to consolidate data centers in the most efficient and cost effective manner while minimizing risk and disruption to customer services, a phased approach to consolidation has been established. These phases are transition, migration, and optimization. First, megacenters are established as the Defense Information Service Organization single utility; this phase

was completed this month. Second, the megacenters are populated with workload from the sites to be disestablished; by the end of 1994, workload from 11 legacy sites will have migrated to a megacenter. Finally, the megacenters' performance as data processing service providers to the DoD community is optimized.

Data center consolidation savings for Fiscal Years 1994 - 1999 reflect a cumulative total of $1.07 billion. One time costs are $581 million with a net savings of $489 million.

With regard to DISN, the Air Force Network and the Army Streamlining Information Service Operations Consolidation Studies Network have been fully integrated as the cornerstone of DISN. Integration of the Marine Corps Data Network into DISN currently is being accomplished, and is expected to be completed by the end of this fiscal year. During Fiscal Year 1995, the Navy Network and the Defense Logistics Agency Corporate Network will be completely transitioned to DISN, and efforts will be well underway to transition more than 100 smaller networks onto DISN.

The Department is establishing a standards-based framework for defining technical architectures to ensure interoperability, portability, and scalability of our systems. This framework is reflected in the Technical Architecture Framework for Information Management which provides the integrated guidance that governs the evolution of the Department's technical infrastructure.

We have established the Information Technology Standards Program as the mechanism for adopting, developing, specifying, certifying, and enforcing technical standards. This effort will reduce systems costs and improve the interoperability, efficiency and effectiveness of our information systems -- both internally and with external organizations such as suppliers and allies.

Currently, information security activities and resources are being consolidated under the DISA. These resources will be used to support the definition of a comprehensive and coherent DoD information systems security policy, define and implement a standard DoD evaluation, certification, and accreditation process, and ensure that security considerations are adequately incorporated into automated information system architectures.

Mr. Chairman, permit me to spend a little time addressing central design activities (CDAs) because I understand the Committee is interested in the impact on CIM with the CDAs remaining with the Services and Agencies.

CDAs exist only to support functions such as finance and accounting, civilian personnel management, and logistics. The appropriate placement of CDAs, therefore, should be dictated by what makes sense economically and in terms of mission support. As decisions are made on which legacy systems to continue and which ones to terminate, decisions on what to do with the associated CDAs will be made accordingly.

The elimination of legacy systems across all of DoD, particularly the business systems and combat support systems, will substantially determine the centralization, consolidation, or even the elimination of CDAs. Placing CDAs on a fee-for-service basis may make these determinations even easier.

Always seeking improvements, the Department initiated an independent study of the implementation of the Defense Information Infrastructure called for by Secretary of Defense Perry. The study is being conducted by Booz, Allen & Hamilton, and is about to be finalized. It provides an executable set of actions for proceeding with the management of an orderly implementation of the Defense Information Infrastructure and the Corporate Information Management initiatives. We have developed an action plan for the implementation of the study recommendations. Pending final approval by the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) of the study results and the action plan, we will move aggressively toward implementation.

In summary, I believe we have made good progress, but let there be no doubt. We are not satisfied and will continue to press for faster action at every opportunity. At the same time, I am pleased there is broad based DoD consensus about many of the actions that are underway. We are selecting and transitioning to migration systems. Standardization of data elements is receiving high priority from functional users. Consolidation and centralization of data centers and telecommunication networks are occurring. The Booz, Allen & Hamilton study results will assist in identifying further targets of opportunity, and in charting the course for the future.

Examining and integrating information activities across the Department is a process of continuing evolutionary improvements. However, the Department is committed to the improvements, efficiencies and productivity that are the essence of the CIM and DII goals and initiatives. We appreciate the subcommittee's continued support for achieving our goals.